



Water-Data Report 2008

01401650 PIKE RUN AT BELLE MEAD, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°28'05", long 74°38'56" referenced to North American Datum of 1983, Hillsborough Township, Somerset County, NJ, Hydrologic Unit 02030105, on right bank 20 ft upstream from bridge on Township Line Road, 0.7 mi east of Belle Mead, 0.8 mi upstream from Cruser Brook, and 1.0 mi downstream from bridge on U.S. Route 206.

DRAINAGE AREA.--5.36 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1980 to current year.

REVISED RECORDS.--WDR NJ-01-1: 1994(M), 1996(M), 1997(P), 1999(P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete parking-block control. Datum of gage is 58.85 ft above NGVD of 1929.

REMARKS.--Records fair, except for estimated daily discharges and daily discharges below 0.5 ft³/s, which are poor. Several measurements of water temperature were made during the year. Some regulation during summer months, possibly from irrigation. Rain gage and gage-height radio telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 1	2230	302	5.51
Feb 13	1715	522	6.64
Mar 8	1715	*815	*7.86
Sep 6	2200	350	5.78
Sep 28	2145	490	6.49

Water-Data Report 2008

01401650 PIKE RUN AT BELLE MEAD, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.08	0.79	1.6	12	83	10	4.0	2.8	2.5	0.74	0.86	0.14
2	0.09	0.69	1.4	8.9	37	11	4.4	2.8	2.3	0.64	0.96	0.11
3	0.10	0.63	15	5.7	11	10	3.1	2.4	2.5	0.54	1.1	0.08
4	0.10	0.61	6.5	4.4	8.7	12	12	2.4	7.9	0.51	0.77	0.08
5	0.10	0.56	3.4	4.0	8.7	45	7.6	2.4	10	3.2	0.65	0.08
6	0.10	0.89	2.4	4.1	9.4	e12	5.0	2.2	4.2	3.3	0.56	62
7	0.10	0.89	1.9	4.6	9.2	19	4.4	1.8	4.1	1.5	0.51	30
8	0.09	0.71	1.7	4.1	6.9	220	3.9	1.9	3.3	1.4	0.50	2.2
9	0.09	0.68	1.8	3.9	6.2	28	3.4	18	2.7	1.1	0.38	6.6
10	0.44	0.65	11	3.3	7.4	13	3.3	19	2.9	0.83	0.28	2.5
11	2.1	0.63	5.5	14	5.4	9.8	3.0	5.9	2.9	0.67	0.46	1.1
12	1.9	0.56	4.5	9.4	4.0	8.1	15	11	2.8	0.51	0.41	1.0
13	0.58	0.64	15	6.5	228	6.0	5.9	8.7	2.8	0.43	0.39	1.8
14	0.35	0.68	23	13	35	5.9	4.2	5.3	2.9	0.82	0.44	1.1
15	0.26	1.4	12	11	15	6.1	3.1	5.8	5.1	0.67	0.66	0.86
16	0.22	2.1	42	6.9	11	5.5	2.5	23	1.7	0.48	0.75	0.74
17	0.20	1.1	19	5.5	9.6	5.0	2.2	23	1.1	0.34	0.36	0.72
18	0.18	0.87	8.4	34	43	4.1	2.2	9.4	1.3	0.29	0.32	0.59
19	0.20	1.5	6.2	11	18	26	2.1	9.4	1.4	0.24	0.29	0.58
20	1.1	3.0	7.0	7.5	10	59	2.0	16	1.4	0.22	0.25	0.55
21	0.45	2.8	7.1	e4.5	8.5	12	2.0	15	1.2	0.70	0.21	0.55
22	0.31	1.9	6.2	4.4	8.3	8.7	2.0	7.1	1.3	0.38	0.18	0.44
23	0.23	2.0	52	4.2	9.6	6.5	2.0	5.3	1.3	22	0.18	0.32
24	0.25	1.6	35	e3.5	10	5.7	2.0	5.6	1.1	34	0.18	0.38
25	0.62	1.5	10	e2.5	16	4.8	2.0	8.3	1.1	4.3	0.18	0.38
26	0.82	13	7.9	e2.5	19	4.5	2.0	2.9	1.1	1.5	0.18	2.4
27	49	9.9	13	2.4	24	4.1	2.0	4.4	0.95	1.1	0.16	1.3
28	7.7	4.4	8.7	e2.3	12	3.9	9.4	3.2	0.86	0.85	0.10	101
29	2.6	2.7	50	2.2	9.3	3.5	12	2.6	0.92	0.95	0.10	80
30	1.4	2.0	11	3.7	---	3.0	3.7	2.4	0.92	1.1	0.18	20
31	0.98	---	30	3.0	---	2.9	---	3.2	---	1.1	0.19	---
Total	72.74	61.38	420.2	209.0	683.2	575.1	132.4	233.2	76.55	86.41	12.74	319.60
Mean	2.35	2.05	13.6	6.74	23.6	18.6	4.41	7.52	2.55	2.79	0.41	10.7
Max	49	13	52	34	228	220	15	23	10	34	1.1	101
Min	0.08	0.56	1.4	2.2	4.0	2.9	2.0	1.8	0.86	0.22	0.10	0.08
Cfsm	0.44	0.38	2.53	1.26	4.40	3.46	0.82	1.40	0.48	0.52	0.08	1.99
In.	0.50	0.43	2.92	1.45	4.74	3.99	0.92	1.62	0.53	0.60	0.09	2.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.00	8.66	11.7	13.0	12.7	14.3	13.2	8.10	5.62	5.83	2.94	4.96
Max	41.9	24.1	35.5	43.3	27.5	38.8	46.3	26.2	31.4	26.1	9.94	56.9
(WY)	(2006)	(2007)	(1997)	(1996)	(1994)	(1994)	(2007)	(1989)	(2003)	(1984)	(1990)	(1999)
Min	0.40	0.28	0.12	0.04	1.97	2.59	2.18	1.54	0.37	0.00	0.17	0.02
(WY)	(2002)	(1999)	(1999)	(1981)	(2002)	(2006)	(1985)	(2005)	(1995)	(1999)	(1980)	(2005)

01401650 PIKE RUN AT BELLE MEAD, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2007		Water Year 2008		Water Years 1980 - 2008	
Annual total	3,216.87		2,882.52			
Annual mean	8.81		7.88		9.02	
Highest annual mean					14.3	1984
Lowest annual mean					3.32	2002
Highest daily mean	529	Apr 15	228	Feb 13	1,590	Sep 16, 1999
Lowest daily mean	0.08	Sep 26	0.08	Many days	0.00	Aug 20, 1980
Annual seven-day minimum	0.08	Sep 25	0.10	Oct 1	0.00	Aug 20, 1980
Maximum peak flow			815	Mar 8	^a 4,120	Sep 16, 1999
Maximum peak stage			7.86	Mar 8	^b 13.61	Sep 16, 1999
Instantaneous low flow			0.07	Sep 5, 6	0.00	Aug 20, 1980
Annual runoff (cfsm)	1.64		1.47		1.68	
Annual runoff (inches)	22.33		20.01		22.85	
10 percent exceeds	13		15		16	
50 percent exceeds	1.9		2.7		2.7	
90 percent exceeds	0.19		0.29		0.29	

^a From rating curve extended above 790 ft³/s on basis of step-backwater computation.

^b From high-water mark in gage, maximum stage since at least 1810.

